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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/502,473	08/30/2004	Mark Edward Dawes	PF0136USPCt	3902
31344	7590	05/25/2007	EXAMINER	
RATNERPRESTIA			BRUENJES, CHRISTOPHER P	
P.O. BOX 1596			ART UNIT	
WILMINGTON, DE 19899			PAPER NUMBER	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/502,473	Applicant(s) DAWES ET AL.	
	Examiner Christopher P. Bruenjes	Art Unit 1772	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 March 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10, 15-24, 26-32 and 34-54 is/are pending in the application.
- 4a) Of the above claim(s) 24, 26-32 and 34-36 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10, 15-23 and 37-54 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

WITHDRAWN REJECTIONS

2. The claim objections and the 35 U.S.C. 112 rejections of record in the Office Action mailed December 4, 2006, Pages 3-4 Paragraphs 3-6, have been withdrawn due to Applicant's amendments in the Paper filed March 23, 2007.

3. The 35 U.S.C. 103 rejections of record over Hanaoka in view of Kendig, Boyce and Hart respectively of record in the Office Action mailed December 4, 2006, Pages 7-12 Paragraphs 9-11, have been withdrawn due to Applicant's amendments in the Paper filed March 23, 2007.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. Claims 1-6, 10, 15-18, and 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kendig (WO 01/054886 A1) in view of Meilhon (USPN 6,105,776).

Regarding claim 1, Kendig teaches a packaging film comprising a heat sealable multi-layer polymeric film comprising an outer shrinkable substrate layer and an inner heat-sealable layer (p.2, 1.1-5). The substrate layer has a degree of shrinkage in longitudinal dimension of the tube of about 0% to 50% when heated from ambient temperature to a temperature in the range of 55 to 100°C and a degree of shrinkage in a transverse dimension of the tube of about 5 to about 70% when heated from

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ambient temperature to a temperature in the range of 55 to 100°C based on the fact that it is biaxially oriented in the range of approximately 5% to 55% (p.4, 1.20-22).

Kendig fails to teach that the packaging film is formed into an open-ended tube or that it comprises a plurality of separating means which enable one multi-layer portion of said film to be separated from an adjacent multi-layer portion of said film. However, Meilhon teaches wrapping the film completely around the object to be packaged so as to fully envelop the object and teaches forming multiple zones of weakness to permit easy separation of one multi-layer portion of a film from an adjacent multi-layer portion to make it easier to access the object contained within the packaging film (col.1, 1.25 - col.2, 1.5). Therefore, it would have been obvious to one having ordinary skill in the art at the time Applicant's invention was made to wrap packaging film around an object to fully envelop the object and to form multiple zones of weakness to permit easy separation of adjacent portions of the film to make easy access to the object container within the film, as taught by Meilhon.

Thus, it would have been obvious to one having ordinary skill in the art at the time Applicant's invention was made to wrap the heat shrink packaging film of Kendig completely around

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the object to be contained forming an open ended tube and to form the film with multiple zones of weakness to permit easy access to the object contained within the film, as taught by Meilhon.

Regarding claims 2-3, the ratio of shrinkage in the transverse dimension relative to that in the longitudinal dimension is in the range from 1:1 to 10:1 and is greater than 1:1 (p.18, examples 28-31 in Table 3 of Kendig).

Regarding claim 4, the shrinkage values are preferably low such as 10-20% biaxially (p.10, 1.3-5 of Kendig).

Regarding claims 5-6, the substrate layer comprises PET or copolyester in which the major repeat unit is ethylene terephthalate (p.4, 1.16-19 of Kendig).

Regarding claim 10, the substrate layer comprises two or three discrete layers (p.4, 1.1-7 of Kendig).

Regarding claims 15-17, Kendig teaches that the inner heat-sealable copolyester added to the substrate film comprises copolyester of butylene glycol with about 10 to 60% terephthalic acid and 10 to 60% sebacic acid (p.5, 1.29-38).

Regarding claim 18, Kendig teaches the film further comprises a printable or ink-receiving layer disposed a surface of the substrate layer opposite the heat-sealable layer (p.4, 1.5-7).

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Regarding claim 21, Kendig teaches that the inner heat-sealable copolyester layer renders the film peelable (p.13, 1.11-18).

Regarding claims 22-23, Meilhon teaches that the film should contain multiple separating means wherein each separating means comprises one or two sets of perforations to provide the film with easy access to the object contained within the film (col.2, 1.34-36 and 1.52-55).

Regarding claims 37, 40, 43, 46, 49, and 52, Kendig teaches that multiple layers are formed on the substrate layer described above and the layers added comprise copolyesters of terephthalic acid with two or more aliphatic glycols (p.7, 1.13-20).

7. Claims 7-9 and 37-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kendig in view of Meilhon as applied to claims 1-5 above, and further in view of Boyce et al (WO 99/62982 A1).

Regarding claims 7-9, Kendig and Meilhon teach all that is claimed in claims 1-5 as shown above and Kendig teaches that the substrate layer comprises a copolyester in which the major repeat unit is ethylene terephthalate, but fail to teach the precise copolyesters claimed. However, Boyce et al teach that substrate layers used in forming copolyester shrink films are

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formed from copolyesters comprising 15 to 25% isophthalic acid and 75 to 85% terephthalic acid and one or more diols are ethylene glycol (p.3, 1.12-29). These copolyesters provide improvements over other shrinkable films with regard to hot food products including insufficient shrinkage, unbalanced shrinkage, lack of stability at high temperatures, and brittleness (p.1, 1.34 - p.2, 1.4).

Therefore, it would have been obvious to one having ordinary skill in the art at the time Applicant's invention was made that the particular copolyesters of Boyce et al would be used as the copolyesters broadly described in Kendig because both Boyce et al and Kendig are concerned with cook-in food shrink films and Boyce et al teach that these particular copolyesters will improve the properties of the shrink film that are useful in the use of cook-in shrink films.

Regarding claims 37-54, Kendig teaches that multiple layers are formed on the substrate layer described above and the layers added comprise polyesters (p.7, 1.13-20). Boyce et al teach that the polyesters used to form the shrink film provide the film with improved shrink properties if the polyester is copolyester having two or more aliphatic glycols including ethylene glycol and 1,4-cyclohexane dimethanol (p.3, 1.18-22).

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Therefore, it would have been obvious to one having ordinary skill in the art at the time Applicant's invention was made to form the multiple layers of the substrate layer of Kendig in the configuration of A/B or A/B/A with both A and B being formed from copolyesters comprising terephthalic acid and/or isophthalic acid with ethylene glycol and/or 1,4-cyclohexanedimethanol because Kendig teaches that the substrate layer can contain multiple polyester layers and Boyce et al teach that those particular copolyesters provide improved shrink properties to films used in cook-in food packaging.

8. Claims 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kendig in view of Meilhon as applied to claim 18 above, and further in view of Hart (USPN 5,130,189).

Regarding claim 18, Kendig and Meilhon teach all that is claimed in claim 18 as shown above, but fail to teach the particular polymer used to form the printable or ink-receiving layer. However, Hart teaches that a printable layer polymer attached to a PET base film to improve the printability of the film comprises 46% ethyl acrylate, 46% methyl methacrylate, and 8% methacrylamide because it provides adequate adhesion of toners without corona discharge treatment (col.5, 1.45-51). Therefore, it would have been obvious to one having ordinary

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skill in the art at the time applicant's invention was made to add the printable layer of Hart to a PET base film in order to improve the printability of the film because it is a film that does not require surface modification to allow toner to adequately adhere, as taught by Hart.

Thus, it would have been obvious to one having ordinary skill in the art at the time applicant's invention was made to use the particular printable layer taught in Hart as the printable layer broadly described in Kendig, because Hart teaches that this particular printable layer is used on the outer surface of PET base films to provide the film with a surface that adequately adheres to toner without requiring expensive surface treatments such as corona discharge.

Response to Arguments

9. Applicant's arguments with respect to claims 1-10 and 15-23 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is

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reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher P. Bruenjes whose telephone number is 571-272-1489. The examiner can normally be reached on Monday thru Friday from 8:00am-4:30pm.

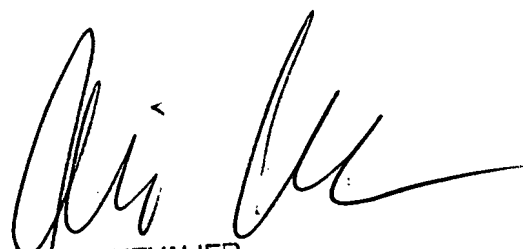
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on 571-272-1498. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Christopher P Bruenjes
Examiner
Art Unit 1772

CPB *CPB*
May 18, 2007


ALICIA CHEVALIER
PRIMARY EXAMINER